



U.S. Patent Application No. 08/605,628

Atty. Docket No.: S4264.000

PATENT

ATTY. DOCKET NO.: S4264.000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before The Board Of Patent Appeals And Interferences

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In Re Appeal of Application: )  
Charles B. SIMONE )  
Serial No.: 08/605,628 )  
Filed: February 22, 1996 )  
For: METHOD AND APPARATUS )  
FOR LIFESTYLE RISK )  
EVALUATION AND INSURABILITY )  
DETERMINATION )

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APPELLANT'S REPLY BRIEF

Assistant Commissioner for Patents  
Washington, D.C. 20231

This is a reply, pursuant to 35 U.S.C. § 134 and 37 C.F.R. § 1.191 et seq., to the Examiner's Answer filed April 24, 1998. It is believed that no fee is due at present. Any

deficiency in the fees associated with this reply brief should be charged to deposit account no. 04-1073.

Statements as to the real party in interest, related appeals and interferences, the status of the claims, the status of amendments, a summary of the invention, the issues of the Appeal, and the grouping of the claims may be found in Appellant's Appeal Brief, filed December 15, 1997.

#### I. NEW POINTS OF ARGUMENT

1. **The Examiner Has Ignored The Methodology In The Examination Guidelines For Determining Whether The Claimed Invention Complies With Section 101.**

Throughout the Examiner's response to Appellant's arguments regarding the § 101 rejections, the Examiner has selectively invoked the Examination Guidelines for Computer-Related Inventions. The Appendix of the Examination Guidelines for Computer-Related Inventions provides a flowchart for determining whether a claimed invention complies with § 101. The first step is to classify the claimed invention. Specifically, Inquiry One is to determine whether the claimed

invention recites functional descriptive material (data structure per se or computer program per se), non-functional descriptive material (such as music, literary works, or mere data) per se or on computer readable medium, or a natural phenomenon.

Examination Guidelines for Computer-Related Inventions, 61 FR 7478, Appendix, page A-2. If the answer to Inquiry One is yes to any of the above, then the claimed invention recites non-statutory subject matter. If, however, the answer to Inquiry One is no, then the Examiner is directed to another inquiry.

Inquiry Two is whether the claimed invention is either a series of steps to be performed on a computer or a specific machine or manufacture. If a specific machine or manufacture, it is a statutory product complying with § 101. If, however, the invention is either a series of steps to be performed on a computer or neither of the two, then another inquiry is performed.

This inquiry, Inquiry Three, is whether the process performs independent physical acts, manipulates data representing physical objects or activities to achieve a practical application, or merely manipulates abstract ideas or solves a

purely mathematical problem without any limitation to a practical application.

If the process performs independent physical acts or manipulates data representing physical objects or activities to achieve a practical application, the claim recites statutory subject matter. If the process does not perform independent physical acts, does not manipulate data representing physical objects or activities to achieve a practical application, and does not merely manipulate abstract ideas or solve a purely mathematical problem without any limitation to a practical application, the claim recites statutory subject matter. If the process merely manipulates abstract ideas or solves a purely mathematical problem without any limitation to a practical application, the claim is to non-statutory subject matter.

The Examiner has rejected claims 1-8 under § 101 as being directed to an abstract idea and a mathematical algorithm which does not provide a practical application within the technological arts.

To perform a proper Inquiry One, it is necessary to determine whether the claimed subject matter as a whole is merely a disembodied mathematical concept, which represents nothing more than a law of nature, a natural phenomenon, or an abstract idea. In re Alappat, 33 F.3d 1526, 1543 (Fed. Cir. 1994). While, like the claim elements at issue in In re Alappat, many of the means elements recited in the instant claim 1 represent circuitry elements that perform mathematical calculations, the claimed invention as a whole is directed to a combination of interrelated elements which combine to form a machine which converts survey information pertaining to an individual's lifestyle, health, and medical history into an overall risk evaluation and monetary insurance value assessment. This is not a disembodied mathematical concept which can be characterized as an abstract idea or mathematical algorithm. Rather, this is a specific machine to produce a useful, concrete and tangible result. See In re Alappat, 33 F.3d at 1544. Thus, despite the Examiner's arguments to the contrary, under both the Examination Guidelines and legal precedence, the apparatus claims at issue here pass the threshold Inquiry One.

Focusing on Inquiry Two, Appellant rebuts the Examiner's arguments that the instant claims do not recite a new machine, or in the parlance of the Examination Guidelines, a specific machine or manufacture. In response to the Appellant's arguments that the claims in the instant application are statutory computer claims, the Examiner contends "that it was the specific programming disclosed by Alappat that the court held as the basis for their reasoning that a new machine was created" (emphasis in original). The Examiner quotes from In re Alappat that "we have held that such programming creates a new machine because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform a particular function pursuant to instructions from program software." In re Alappat, 33 F.3d 1526, 1545 (Fed. Cir. 1994). The Examiner concludes that the quoted language cannot and should not be extrapolated to mean that any and every kind of computer programming for generating special data creates a new process or machine. The Examiner's conclusion is simply erroneous.

The Examiner misinterprets the quoted language from In re Alappat. Both the Federal Circuit, in In re Alappat, and its

predecessor court have held that programming creates a new machine, because a general purpose computer becomes a special purpose computer once it is programmed to perform particular functions. See In re Freeman, 573 F.2d 1237, 1247, n. 11 (C.C.P.A. 1978); In re Noll, 545 F.2d 141, 148 (C.C.P.A. 1976); In re Prater, 415 F.2d 1393, 1403, n. 29 (C.C.P.A. 1969).

It is thus clear, and the Appellant submits to the Board, that the quoted language in In re Alappat does indeed mean that computer programming for generating particular functions or specialized data creates a new process or machine which may represent patentable subject matter. Specifically, the Federal Circuit held in In re Alappat that "a computer operating pursuant to software may represent patentable subject matter, provided, of course, that the claimed subject matter meets all of the other requirements of Title 35. In any case, a computer, like a rasterizer, is apparatus not mathematics." In re Alappat, 33 F.3d at 1545. Thus, under In re Alappat, as well as under the Examination Guidelines, the instant claims 1-6 recite a specific machine which is a statutory product.

The Examiner also directs the Board's attention to In re Trovato, 33 USPQ2d 1194 (Fed. Cir. 1994) as supporting the Examiner's contention that "claims nominally reciting the use of computers operating pursuant to software do not automatically escape scrutiny under 35 USC 101." The Appellant makes two observations regarding the In re Trovato case.

First, the In re Trovato case is clearly distinguishable from the instant case. In In re Trovato, the Federal Circuit stated that "Our review of Trovato's application in its entirety indicates that they do not disclose a machine of any sort. We can discern no disclosed apparatus provided in the specifications as suggested in the various claim preambles. Further, all the disclosed means are simply software instructions; no 'structure' appears in the specification as required under § 112, ¶ 6." Id. at 1199.

In the instant application, structure is disclosed in the specification pertaining to some of the means elements claimed and the Examiner admits as much in her Answer. Specifically, the Examiner states that "the survey means is a database as recited at page 13, lines 1-7 of the specification....The messaging means



is a general purpose computer peripheral, such as a display device or printer, as recited at page 18, lines 6-12 of the instant specification." Examiner's Answer, page 12. Since there is structure disclosed in the instant application, the Examiner erroneously relies on In re Trovato.

Furthermore, Appellant wishes to point out to the Board that the Federal Circuit took the unusual step of vacating the In re Trovato decision. See In re Trovato, 60 F.3d 807 (Fed. Cir. 1995) ("Since the challenged Board decisions, this court has decided In re Alappat...providing further guidance on section 101.").

Regarding the instant claims 7 and 8, as well as claims 1-6 if the Board determines that they do not recite a specific machine or manufacture under Inquiry Two, Inquiry Three also must be answered.

The Examiner contends that Appellant's arguments that claims 1 and 7 are statutory because they are process claims reciting pre-computer activity is unavailing. The rationale given by the Examiner is that all of the examples of pre-computer

activity provided in the Examination Guidelines are directed to physical waveforms or physical transformations in data signals outside of the computer into computer data. Since the pre-computer activity recited in claims 1 and 7 are not within the examples provided in the Examination Guidelines, the Examiner contends that "Appellant's claims are clearly not directed to 'pre-computer process activity' as clearly set forth in section IV.B.2(b)(i) of the Examination Guidelines, and thus the instant claims cannot be regarded as statutory subject matter." Examiner's Answer, page 13.

The Examiner submits that claims 1 and 7 are non-statutory in that they are not limited to a practicable application in the technological arts. Specifically, the Examiner states that "Appellant's claimed invention, while reciting a practical application of determining the insurability of an individual (thereby providing utility to the invention), is not by its recitations limited to a practical application in the technological arts, as no explicit recitations of the physical transformation or interactions with specific computer structures are provided which clearly denote the improvement over or utility

of a computer or data processor aside from its routine use." Examiner's Answer, page 14. The Examiner further contends that the Appellant's claims are clearly not limited by the language in the claims to a practical application in the technological arts in the manner set forth in Section IV.B.2(b)(ii) of the Examination Guidelines.

Appellant submits that the Examiner's reasoning that the instant claims are not within the technological arts is flawed, and inconsistent with the Examination Guidelines and legal precedence. The Examiner argues as if the Examination Guidelines are exhaustive as to what is within the technological arts, i.e., only claims which are directed to physical waveforms or which recite physical transformation or interactions within specific computer structures. Significantly, the Examination Guidelines themselves indicate that "a physical transformation... is not determinative of whether the process is statutory because such transformation alone does not distinguish a statutory computer process from a non-statutory computer process." Examination Guidelines, 61 FR 7478, IV.B.2(b)(ii).

As to the Examiner's argument that the absence of any explicit recitation of the physical transformation or interactions with specific computer structures which clearly denotes the improvement over or utility of a computer or data processor aside from its routine use, the Appellant has two observations. The first is that the Examiner appears to be attempting to mold a § 102 or § 103 argument into the § 101 inquiry. Whether a particular claim is novel or nonobvious over other references is an inquiry to be determined under Title 35, but not under § 101.

The second is that the technological or useful arts inquiry must focus on whether the claimed subject matter is statutory, not on whether the prior art which the claimed subject matter purports to replace is statutory. In re Toma, 575 F.2d 872, 877-78 (C.C.P.A. 1978).

Appellant wishes to direct the Board to Arrhythmia Research Technology v. Corazonix Corp., 958 F.2d 1053 (Fed. Cir. 1992). In that case, the Federal Circuit held that the process claims at issue, which recite a method of analyzing a part of an electrocardiographically measured heart cycle to determine a

specified heart activity, are statutory subject matter. The Federal Circuit found that the claims, which recite converting, applying, determining, and comparing steps, do not encompass subject matter transcending the invention. Instead, the Court found that these steps "are physical process steps that transform one physical, electrical signal into another." Id. at 1059. Further, the Court found the apparatus claims at issue, which recite a combination of interrelated means for performing specific functions, to be directed to statutory subject matter since the recited computer-performed operations "transform a particular input signal to a different output signal, in accordance with the internal structure of the computer as configured by electronic instructions." Id. at 1060.

The instant method claims 7-8, which recite assigning, determining, comparing, and choosing steps, are similar in the § 101 context to the method claims reciting statutory subject matter in the Arrhythmia Research case. The instant method claims 7-8 recite steps which manipulate data representing physical objects or activities to achieve a practical

application, consistent with both the Examination Guidelines and the holding in Arrhythmia Research.

Further, the instant apparatus claims 1-6, which recite assigning, determining, comparing and analyzing means, are similar in the § 101 context to the apparatus claims reciting statutory subject matter in the Arrhythmia Research case. The instant claims 1-6 recite means for transforming a particular input signal to a different output signal, consistent with both the Examination Guidelines and the holding in Arrhythmia Research.

**2. Claims 1-8 Are Non-Obvious Over Detore Et Al.,  
And The Rejection Under 35 U.S.C. § 103 Should  
Be Reversed By This Board.**

The Examiner states that "DeTore clearly teaches the gathering of personal data such as age, address, occupation, avocations, income level, etc.; the gathering of medical data such as prior medical problems, existing conditions, medications, etc.; and the gathering of 'any other information received from the applicant which may have a bearing on insurability.'" Examiner's Answer, page 14. From this contention, the Examiner concludes that DeTore would suggest to one ordinarily skilled to

include lifestyle questions in the "any other information received from the applicant which may have a bearing on insurability." Examiner's Answer, page 15 (quoting DeTore, col. 4, lines 29-30).

This contention of obviousness is erroneous. The DeTore patent fails to provide useful treatment recommendations for health problems or tips for altering one's lifestyle. Instead, DeTore merely provides an individual with general literature on a medical problem.

Contrary to the Examiner's contention, a complete survey of an individual's health is not an obvious application of DeTore because it is not in the ordinary practice of risk assessors to inquire into a wide variety of lifestyle choices, let alone to provide recommendations to individuals as to how to reduce insurability risk. As is common in the field of risk assessment, DeTore only focuses on evaluating existing medical problems. It cannot take into consideration lifestyle data as recited in claims 1-8 of the present invention. Likewise, DeTore fails to provide a basis for determining the effect of lifestyle choices on health insurance coverage as claimed by the present invention.

(claim 1). Finally, DeTore fails to analyze and then provide a user with suggestions for improving his or her health condition as in all the claims of the present invention.

In conclusion, the present invention is novel because, in calculating insurance risk, it surveys a wealth of information pertaining to an individual's health. Not only does the present invention evaluate the insurance risk, but it also provides suggestions for improving health and decreasing risk. These functions cannot be accomplished by simple mechanisms which evaluate insurability risk, such as DeTore as well as the other cited prior art references.

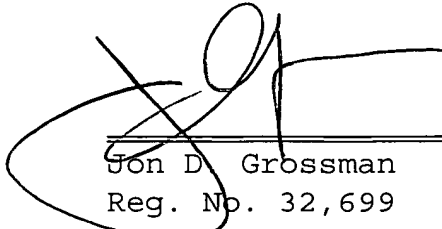
Accordingly, claims 1-8 are non-obvious over DeTore et al. and the rejection under 35 U.S.C. § 103 should be reversed by this Board.



II. CONCLUSION

Therefore, the claims in the present application recite patentable subject matter under 35 U.S.C. § 101, and the claims are non-obvious over DeTore et al. under 35 U.S.C. § 103. The final rejection of claims 1-8 is in error, for at least the reasons given above, and this rejection should be reversed by the Board.

Respectfully submitted,



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Dated: June 17, 1998.